AMENDMENTS TO THE CLAIMS

Docket No.: 69365(54716)

1. (Currently amended) A method for the treatment and/or prophylaxis of diseases or syndromes selected from the group consisting of nitrate-induced tolerance, a disease of the eye, central retinal arterial occlusion, posterior ciliary arterial occlusion, central retinal venous occlusion, optical neuropathy, macular degeneration, diabetes, premature labor, preeclampsia, alopecia, psoriasis, renal syndrome, cystic fibrosis, cancer, age-associated learning and memory disturbance, age-associated memory loss, craniocerebral trauma, post-traumatic craniocerebral trauma, concentration disturbance in a child suffering from learning and memory problems, dementia associated with Lewy bodies; dementia associated with degeneration of the frontal lobes including Pick's syndrome, Parkinson's disease, progressive nuclear palsy, dementia associated with corticobasal degeneration, Huntington's disease, thalamic degeneration, Creutzfeld-Jacob dementia, new variant Creutzfeld-Jacob dementia, HIV dementia, schizophrenia associated with dementia and schizophrenia associated with Korsakoff's psychosis in a subject, in which an improvement in and/or a cure of a syndrome can be achieved by improving the microcirculation of a tissue which contains a cGMP metabolizing phosphodiesterase comprising administering to a subject an effective amount of a cGMPstimulating compound selected from the imidazo[1,3,5]triazinone of the general formula (I)

$$OR^3$$
 HN
 R^1
 $SO_2NR^4R^5$
 R^2
 (I)

in which

- R¹ is straight-chain or branched alkyl having up to 4 carbon atoms,
- R² is straight-chain or branched alkyl having up to 4 carbon atoms or is (C₃-C₈)-cycloalkyl,
- R³ is hydrogen or straight-chain or branched alkyl having up to 4 carbon atoms,

 R^4 and R^5 are identical or different and are hydrogen, (C_1-C_6) -alkoxy or hydroxyl or are (C_1-C_8) -alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C_1-C_6) -alkoxy or a radical of the formula

Docket No.: 69365(54716)

$$- \stackrel{\text{C}}{\longleftarrow} - \stackrel{\text{N}}{\longleftarrow} \text{or } -NR^6R^7$$

in which

 R^6 and R^7 are identical or different and are hydrogen or (C_1-C_6) -alkyl,

and/or, for its part, (C_1-C_8) -alkyl is optionally substituted by phenyl or phenoxy which, for their part, are optionally substituted, once to three times, identically or differently, by halogen, hydroxyl, (C_1-C_6) -alkoxy, (C_1-C_6) -alkyl or a radical of the formula $-SO_2NR^8R^9$,

in which

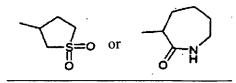
R⁸ and R⁹ are identical or different and are hydrogen or (C₁-C₆)-alkyl,

<u>or</u>

R⁴ is hydrogen or methyl

and

R⁵ is a radical of the formula



<u>or</u>

is phenyl which is optionally substituted, up to 3 times, identically or differently, by halogen, acetyl, (C₁-C₆)-alkoxy or a radical of the formula

,
$$-NR^{10}R^{11}$$
 or $-CH_2-P(O)(OR^{12})(OR^{13})$

5

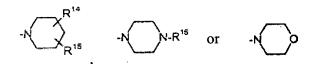
Docket No.: 69365(54716)

in which

 R^{10} and R^{11} are identical or different and are hydrogen or (C_1-C_4) -alkyl, R^{12} and R^{13} are identical or different and are hydrogen or (C_1-C_6) -alkyl,

<u>or</u>

R⁴ and R⁵, together with the nitrogen atom to which they are bonded, are a radical of the formula



in which

 R^{14} and R^{15} are identical or different and are hydroxyl, hydrogen or (C_1-C_4) -alkyl which is optionally substituted by hydroxyl,

<u>or</u>

R¹⁴ is hydrogen

and

R¹⁵ is a radical of the formula



<u>or</u>

 R^{14} and R^{15} together form a radical of the formula =N-O-CH₃,

 R^{16} is hydrogen or (C_1-C_6) -alkyl which is optionally substituted by hydroxyl, or

is a 5- to 6-membered, aromatic heterocycle having up to 3 hetero atoms from the series, S, N and/or O,

or the salts, hydrates of the salts, N-oxides and isomeric forms thereof, thereby treating said disease in said subject.

2-4. (Cancelled)

5. (Currently amended) The method of claim [[4]]1, wherein the compound is selected from the compounds of the general formula (I) in which

6

R¹ is methyl or ethyl,

R² is straight-chain or branched alkyl having up to 3 carbon atoms or is (C₃-C₆)-cycloalkyl,

R³ is straight-chain or branched alkyl having up to 3 carbon atoms,

R⁴ and R⁵ are identical or different and are hydrogen, (C₁-C₄)-alkoxy or hydroxyl or are (C₁-C₇)-alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C₁-C₄)-alkoxy or radicals of the formulae

$$-\sqrt{} - \sqrt{} \qquad \text{or } -NR^6R^7$$

in which

R⁶ and R⁷ are identical or different and are hydrogen or methyl,

and/or, for its part, (C_1-C_7) -alkyl is optionally substituted by phenyl or phenoxy which, for their part, are optionally substituted, once to three times, identically or differently, by fluorine, chlorine, hydroxyl, (C_1-C_4) -alkoxy or (C_1-C_4) -alkyl or by a radical of the formula $-SO_2NH_2$,

or

R⁴ is hydrogen or methyl,

and

R5 is <u>a radical[[s]]</u> of the formula[[e]]

or

is phenyl which is optionally substituted, up to 3 times, identically or differently, by fluorine, chlorine, acetyl or (C_1-C_4) -alkoxy or by <u>a</u>radical[[s]] of the formula[[e]]

Docket No.: 69365(54716)

$$-o$$
, $-NR^{10}R^{11}$ or $-CH_2-P(O)(OR^{12})(OR^{13})$

in which

R¹⁰ and R¹¹ are identical or different and are hydrogen or methyl,

R¹² and R¹³ are identical or different and are hydrogen or methyl,

or

 R^4 and R^5 , together with the nitrogen atom to which they are bonded, are <u>a</u> radical[[s]] of the formula[[e]]

in which

R¹⁴ and R¹⁵ are identical or different and are hydroxyl, hydrogen or (C₁-C₃)-alkyl which is optionally substituted by hydroxyl,

or

R¹⁴ is hydrogen

and

R¹⁵ is a radical of the formula



or

R¹⁴ and R¹⁵ together form a radical of the formula =N-O-CH₃,

R¹⁶ is hydrogen or (C₁-C₅)-alkyl which is optionally substituted by hydroxyl, or is pyridyl, pyrimidyl, furyl, pyrryl or thienyl,

[[and]]or the salts, hydrates, hydrates of the salts, N-oxides and isomeric forms thereof.

6. (Currently amended) The method of claim [[4]]1, wherein the compound is selected from the compounds of the general formula (I) in which

R¹ is methyl or ethyl,

R² is n-propyl or cyclopentyl,

R³ is methyl, ethyl or n-propyl,

 R^4 and R^5 are identical or different and are hydrogen, (C_1-C_3) -alkoxy or hydroxyl or are (C_1-C_6) -alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl or (C_1-C_3) -alkoxy or by <u>a_radical[[s]]</u> of the formula[[e]]

8

$$-\sqrt{} - \sqrt{} \qquad \text{or } -NR^6R^7$$

in which

R⁶ and R⁷ are identical or different and are hydrogen or methyl, and/or, for its part, (C₁-C₆)-alkyl is optionally substituted by phenyl or phenoxy which, for their part, are optionally substituted, once to three times, identically or differently, by fluorine, hydroxyl or methoxy or by a radical of the formula_-SO₂NH₂,

or

R⁴ is hydrogen or methyl

and

R⁵ is <u>a radical[[s]]</u> of the formula[[e]]

or

is phenyl which is optionally substituted, up to 3 times, identically or differently, by fluorine, acetyl or methoxy or by <u>a</u>radical[[s]] of the formula[[e]]

-0,
$$-NR^{10}R^{11}$$
 or $-CH_2-P(O)(OR^{12})(OR^{13})$

in which

 R^{10} and R^{11} are identical or different and are hydrogen or methyl, R^{12} and R^{13} are methyl,

Docket No.: 69365(54716)

OI

R⁴ and R⁵, together with the nitrogen atom to which they are bonded, are radicals of the formulae

9

in which

R¹⁴ and R¹⁵ are identical or different and are hydroxyl or hydrogen or a radical of the formula - (CH₂)₂-OH,

or

R¹⁴ is hydrogen

and

R¹⁵ is a radical of the formula

or

R¹⁴ and R¹⁵ together form a radical of the formula =N-O-CH₃,

R¹⁶ is hydrogen, pyrimidyl or a radical of the formula -(CH₂)₂-OH

[[and]]or the salts, hydrates, hydrates of the salts, N-oxides and isomeric forms thereof.

7-10. (Cancelled)

11. (New) A method for the treatment of diseases or syndromes selected from the group consisting of amyolateral sclerosis (ALS) and multiple sclerosis in a subject, in which an improvement in and/or a cure can be achieved by improving the microcirculation of a tissue which contains a cGMP metabolizing phosphodiesterase comprising administering to a subject an effective amount of a cGMP-stimulating compound selected from the imidazo[1,3,5]triazinone of the general formula (I)

Docket No.: 69365(54716)

$$OR^3$$
 HN
 R^1
 $SO_2NR^4R^5$
 R^2
 $(I),$

in which

R¹ is straight-chain or branched alkyl having up to 4 carbon atoms,

R² is straight-chain or branched alkyl having up to 4 carbon atoms or is (C₃-C₈)-cycloalkyl,

 R^3 is hydrogen or straight-chain or branched alkyl having up to 4 carbon atoms, R^4 and R^5 are identical or different and are hydrogen, (C_1-C_6) -alkoxy or hydroxyl or are (C_1-C_8) -alkyl which is optionally substituted, up to 3 times, identically or differently, by hydroxyl, (C_1-C_6) -alkoxy or a radical of the formula

in which

R⁶ and R⁷ are identical or different and are hydrogen or (C₁-C₆)-alkyl,

and/or, for its part, (C_1-C_8) -alkyl is optionally substituted by phenyl or phenoxy which, for their part, are optionally substituted, once to three times, identically or differently, by halogen, hydroxyl, (C_1-C_6) -alkoxy, (C_1-C_6) -alkyl or a radical of the formula $-SO_2NR^8R^9$,

in which

R⁸ and R⁹ are identical or different and are hydrogen or (C₁-C₆)-alkyl,

or

R⁴ is hydrogen or methyl

and

R⁵ is a radical of the formula

or

is phenyl which is optionally substituted, up to 3 times, identically or differently, by halogen, acetyl, (C_1-C_6) -alkoxy or a radical of the formula

,
$$-NR^{10}R^{11}$$
 or $-CH_2-P(O)(OR^{12})(OR^{13})$

11

in which

 R^{10} and R^{11} are identical or different and are hydrogen or (C₁-C₄)-alkyl, R^{12} and R^{13} are identical or different and are hydrogen or (C₁-C₆)-alkyl,

or

R⁴ and R⁵, together with the nitrogen atom to which they are bonded, are radicals of the formulae

in which

R¹⁴ and R¹⁵ are identical or different and are hydroxyl, hydrogen or (C₁-C₄)-alkyl which is optionally substituted by hydroxyl,

or

R¹⁴ is hydrogen

and

R¹⁵ is a radical of the formula



or

R¹⁴ and R¹⁵ together form a radical of the formula =N-O-CH₃,

12

 R^{16} is hydrogen or $(C_1\text{-}C_6)$ -alkyl which is optionally substituted by hydroxyl, or

is a 5- to 6-membered, aromatic heterocycle having up to 3 hetero atoms from the series, S, N and/or O,

or the salts, hydrates, hydrates of the salts, N-oxides and isomeric forms thereof, thereby treating said disease in said subject.